



National Transportation Safety Board Aviation Accident Final Report

Location:	PHILADELPHIA, PA	Accident Number:	DCA85AA013
Date & Time:	02/05/1985, 2351 EST	Registration:	N926AX
Aircraft:	McDonnell Douglas DC-9-15	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Serious
Flight Conducted Under:	Part 121: Air Carrier - Non-scheduled		

Analysis

AFTER LNDG, THE ACFT WAS PARKED ON THE RAMP FOR APRX 39 MIN TO LOAD CARGO. DRG THAT TIME, LGT FREEZING DRIZZLE WAS FALLING, INTERMITTENTLY MIXED WITH ICE PELLETS & SNW. THE CREW CHECKED THE ACFT SURFACES FROM THE COCKPIT & ENTRY DOOR, BUT OBSERVED NO ICE OR SNW ADHERING TO THE TOPS OF THE WINGS, NOSE SECTION, WINDSHIELD OR ABOVE THE DOOR. THE CAPT DECLINED AN OFFER TO DE-ICE, THO OTR ACFT WERE BEING DE-ICED. THE TAKEOFF WAS NRML (18 DEG NOSE UP ATTITUDE) UNTIL JUST AFTER LIFT-OFF, THEN THE ACFT ENTERED AN UNCOMMANDED L ROLL & BOTH ENGS COMPRESSOR STALLED. THE CAPT CORRECTED WITH L AILERON & RUDDER, THEN BEGAN ABORTING THE TAKEOFF. THE ACFT TOUCHED DWN LEFT OF THE RWY ON THE TAIL SKID & R WING TIP, APRX 5600' FROM THE THRESHOLD & ON A 070 DEG HDG. IT THEN TRAVELED ANOTHER 2025' IN A SWEEPING RIGHT ARC, HITTING 2 RWY SIGNS & CAME TO REST HDG WEST WITH THE R PYLON BENT DOWN. INV REVEALED A THIN LAYER OF ICE (EST 0.15' THICK) WOULD HAVE BEEN ON THE WINGS, RAISING THE ACFT'S STALL SPEED. WHEN DC-9-15 ACFT STALL, ENGS ARE SUSCEPTIBLE TO COMPRESSOR STALLS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - RAIN
2. (F) WEATHER CONDITION - SNOW
3. (F) WEATHER CONDITION - ICING CONDITIONS
4. (F) LIGHT CONDITION - DARK NIGHT
5. (C) WING - ICE
6. (C) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
7. (F) VISUAL/AURAL DETECTION - PILOT IN COMMAND
8. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

9. ABORTED TAKEOFF - INITIATED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: OTHER

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	40, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	12/12/1984
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	7500 hours (Total, all aircraft), 1800 hours (Total, this make and model), 41 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	McDonnell Douglas	Registration:	N926AX
Model/Series:	DC-9-15 DC-9-15	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	47002
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	Continuous Airworthiness	Certified Max Gross Wt.:	91700 lbs
Time Since Last Inspection:	0 Hours	Engines:	2 Turbo Fan
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	JT8D-7
Registered Owner:		Rated Power:	14000 lbs
Operator:		Operating Certificate(s) Held:	Air Cargo
Operator Does Business As:		Operator Designator Code:	ABEX

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	PHL, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	2351	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 1000 ft agl	Visibility	2 Miles
Lowest Ceiling:	Overcast / 1000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-2 °C / -4 °C
Precipitation and Obscuration:			
Departure Point:	(PHL)	Type of Flight Plan Filed:	IFR
Destination:	WILMINGTON, OH (ILN)	Type of Clearance:	IFR
Departure Time:	2349	Type of Airspace:	

Airport Information

Airport:	PHILADELPHIA INTL (PHL)	Runway Surface Type:	Concrete
Airport Elevation:	21 ft	Runway Surface Condition:	Snow--compacted
Runway Used:	9L	IFR Approach:	None
Runway Length/Width:	9500 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JOHN G YOUNG	Report Date:	
Additional Participating Persons:	RICHARD RODRIGUEZ; WASHINGTON, DC NATHANIEL LUCAS; WASHINGTON, DC JAMES MCLEAN; WASHINGTON, DC FRANK DELGANDIO; WASHINGTON, DC		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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